

In the claims:

Claims 1-29 (Cancelled)

Please add the following new claims:

30. (New) A method of identifying protein/nucleic acid binding pairs, said method comprising:

(a) contacting a molecular beacon array comprising a plurality of distinct molecular beacon probes, wherein each distinct probe of said plurality comprises a different probe sequence and all of said probes of said plurality share a common first fluorescent label, with a population of fluorescently labeled proteins to produce a protein bound array, where each member of said population of fluorescently labeled proteins is labeled with a second fluorescent label that makes up a FRET pair with said first fluorescent label; and

(b) detecting any FRET generated signals from said array to identify protein/nucleic acid binding pairs on said array.

31. (New) The method according to Claim 30, wherein said method further comprises characterizing the protein of a protein/nucleic acid binding pair identified by said method.

32. (New) The method according to Claim 30, wherein said method further comprises characterizing the protein binding sequence of a nucleic acid of a protein/nucleic acid binding pair identified by said method.

33. (New) The method according to Claim 30, wherein said array is contacted with two differentially labeled protein populations.

34. (New) The method according to Claim 33, wherein said two differentially labeled protein populations make up a test/control pair.

35. (New) The method according to Claim 33, wherein said two differentially labeled

protein populations make up a normal/disease pair.

36. **(New)** A system for use in identifying protein/nucleic acid binding pairs, said system comprising:

- (a) a molecular beacon array comprising a plurality of distinct molecular beacon probes, wherein each distinct probe of said plurality comprises a different probe sequence and all of said probes of said plurality share a common first fluorescent label;
- (b) a labeling reagent for labeling a protein population with a second fluorescent label, wherein said first and second labels make up a FRET pair; and
- (c) a fluorescence detector device.

37. **(New)** The system according to Claim 36, wherein said system includes two different labeling reagents for producing two differentially labeled protein populations that are each labeled with a different second fluorescent labeled that makes up a FRET pair with said first fluorescent label.

38. **(New)** The system according to Claim 36, wherein said fluorescence detector device is a fluorescent scanner.

39. **(New)** The system according to Claim 36, wherein said system further comprises reagents necessary for identifying a protein component of an identified protein/nucleic acid binding pair.

40. **(New)** A kit for use in identifying protein/nucleic acid binding pairs, said kit comprising:

- (a) a molecular beacon array comprising a plurality of distinct molecular beacon probes, wherein each distinct probe of said plurality comprises a different probe sequence and all of said probes of said plurality share a common first fluorescent label; and
- (b) a labeling reagent for labeling a protein population with a second fluorescent label, wherein said first and second labels make up a FRET pair.

41. **(New)** The kit according to Claim 40, wherein said kit includes two different labeling

reagents for producing two differentially labeled protein populations that are each labeled with a different second fluorescent labeled that makes up a FRET pair with said first fluorescent label.

42. **(New)** The kit according to Claim 40, wherein said kit further comprises reagents necessary for identifying a protein component of an identified protein/nucleic acid binding pair.

43. **(New)** A substrate comprising a surface having at least one protein/nucleic acid binding pair immobilized thereon, wherein each protein/nucleic acid binding pair comprises:

- (a) a molecular beacon probe comprising a first fluorescent label; and
- (b) a fluorescently labeled protein labeled with a second fluorescent label and bound to said probe, wherein said second fluorescent label and said first fluorescent label make up a FRET pair.

44. **(New)** The substrate according to Claim 43, wherein said substrate comprises two or more different protein/probe binding pairs immobilized on said surface.

45. **(New)** The method according to Claim 30, wherein said method further comprises a data transmission step in which a result from a reading of the array is transmitted from a first location to a second location.

46. **(New)** The method according to Claim 45, wherein said second location is a remote location.

47. **(New)** A method comprising receiving data representing a result of a reading obtained by the method of Claim 30.

48. **(New)** A method of identifying protein/nucleic acid binding pairs, said method comprising:

- (a) contacting a nucleic acid probe array comprising a plurality of distinct probe nucleic acids, wherein each distinct probe nucleic acid of said plurality comprises a different

probe sequence, with a population of labeled proteins to produce a protein bound array; and

(b) detecting any surface bound protein/target nucleic acid complexes to identify protein/nucleic acid binding pairs on said array.

49. **(New)** The method according to Claim 48, wherein said labeled proteins are labeled with a first fluorescent label.

50. **(New)** The method according to Claim 48, wherein said labeled proteins are labeled with an indirectly detectable label.

51. **(New)** The method according to Claim 48, wherein said method further comprises contacting said array with a second population of labeled proteins that are distinguishably labeled from said first population of labeled proteins.

52. **(new)** A method of identifying protein/nucleic acid binding pairs, said method comprising:

(a) contacting a molecular beacon array comprising a plurality of distinct molecular beacon probes, wherein each distinct probe of said plurality comprises a different probe sequence and all of said probes of said plurality share a common first fluorescent label, with at least one fluorescently labeled protein to produce a protein bound array, where said at least one fluorescently labeled protein is labeled with a second fluorescent label that makes up a FRET pair with said first fluorescent label; and

(b) detecting any FRET generated signals from said array to identify protein/nucleic acid binding pairs on said array.

53. **(new)** A method of identifying protein/nucleic acid binding pairs, said method comprising:

(a) contacting a nucleic acid probe array comprising a plurality of distinct probe nucleic acids, wherein each distinct probe nucleic acid of said plurality comprises a different probe sequence, with at least one labeled protein to produce a protein bound array; and

(b) detecting any surface bound protein/target nucleic acid complexes to identify protein/nucleic acid binding pairs on said array.